Canon

PowerShot ELPH 500 HS / IXUS 310 HS

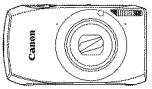
Camera User Guide

- Make sure you read this guide, including the "Safety Precautions" section, before using the camera.
- Reading this guide will help you learn to use the camera properly.
- Store this guide safely so that you can use it in the future.

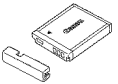
ENGLISH

Checking the Package Contents

Check if the following items are included in your camera package.
If anything is missing, contact the retailer where you purchased the camera.

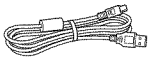


Camera

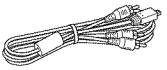


Battery Pack NB-6L
(with Terminal Cover)

Battery Charger
CB-2LY/CB-2LYE



Interface Cable
IFC-400PCU



Stereo AV Cable
AVC-DC400ST

Wrist Strap
WS-DC10

Getting Started

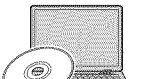
DIGITAL CAMERA
Solution Disk

Warranty
Card

Using the PDF Manuals

The following PDF manuals are included in the Readme folder of the CD-ROM: When the software is installed on your computer, the PDF manuals will be copied to the computer and you can refer to them by clicking the shortcuts on the desktop.

- **Camera User Guide (This Guide)**
  Once you have mastered the basics, use the camera's many features to shoot more challenging photos.
- **Software Guide**
  Read when you want to use the included software.



- A memory card is not included.
- Adobe Reader is required to view the PDF manuals.

Test Shots and Disclaimer

Take some initial test shots and play them back to make sure the images were recorded correctly. Please note that Canon Inc., its subsidiaries and affiliates, and its distributors are not liable for any consequential damages arising from any malfunction of a camera or accessory, including memory cards, that results in the failure of an image to be recorded or to be recorded in a way that is machine readable.

Warning Against Copyright Infringement

The images recorded with this camera are intended for personal use. Do not record images that infringe upon copyright laws without the prior permission of the copyright holder. Please be advised that in certain cases the copying of images from performances, exhibitions, or commercial properties by means of a camera or other device may contravene copyright or other legal rights even if the image was shot for personal use.

Warranty Limitations

This camera's warranty is only effective in the country of sale. If there is a problem with the camera while abroad, please return it to the country of sale before proceeding with a warranty claim to a Canon Customer Support Help Desk. For Canon Customer Support contacts, please see the customer support list supplied with your camera.

LCD Monitor (Screen)

- The LCD monitor is produced with extremely high-precision manufacturing techniques. More than 99.99% of the pixels operate to specification, but occasionally non-performing pixels may appear as bright or dark dots. This is not a malfunction and has no effect on the recorded image.
- The LCD monitor may be covered with a thin plastic film for protection against scratches during shipment. If so, remove the film before using the camera.

Camera Body Temperature

Please take care when operating the camera for an extended period as the camera body may become warm. This is not a malfunction.

What Do You Want to Do?

Shoot

- Shoot, leaving it to the camera to make settings 25

Take good people shots

Portraits (p. 64)

Kids and pets (p. 65)

Facial expressions (p. 81)

At the beach (p. 65)

Against snow (p. 66)

Shoot various other scenes

Night Scene (p. 65)

Low Light (p. 65)

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Fish-eye Effect (p. 69)

Miniature Effect (p. 70)

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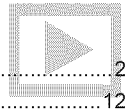

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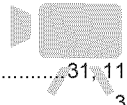

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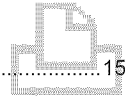
Print



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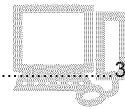
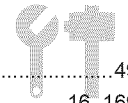
Save



- Save images to a computer 34

Other



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Conventions Used in This Guide

- Icons are used in the text to represent the camera buttons and switches.
- Language that displays on the screen appears inside [ ] (square brackets).
- : Things you should be careful about
- : Troubleshooting tips
- : Hints for getting more out of your camera
- : Supplemental information
- (p. xx): Reference pages ("xx" stands for a page number)
- This guide assumes all functions are at their default settings.
- The various types of memory cards that can be used in this camera are collectively referred to as memory cards in this guide.

Safety Precautions

- Before using the product, please ensure that you read the safety precautions described below. Always ensure that the product is used correctly.
- The safety precautions noted on the following pages are intended to prevent injuries to yourself and other persons, or damage to the equipment.
- Be sure to also check the guides included with any separately sold accessories you use.

⚠ Warning Denotes the possibility of serious injury or death.

- **Do not trigger the flash in close proximity to people's eyes.**

Exposure to the intense light produced by the flash could damage eyesight. In particular, remain at least one meter (39 inches) away from infants when using the flash.

- **Store this equipment out of the reach of children and infants.**

Strap: Putting the strap around a child's neck could result in asphyxiation.

- **Use only recommended power sources.**
- **Do not attempt to disassemble, alter or apply heat to the product.**
- **Avoid dropping or subjecting the product to severe impacts.**
- **To avoid the risk of injury, do not touch the interior of the product if it has been dropped or otherwise damaged.**
- **Stop using the product immediately if it emits smoke, a strange smell, or otherwise behaves abnormally.**
- **Do not use organic solvents such as alcohol, benzine, or thinner to clean the equipment.**
- **Do not let the product come into contact with water (e.g. sea water) or other liquids.**
- **Do not allow liquids or foreign objects to enter the camera.**

This could result in electrical shock or fire.
If liquids or foreign objects come into contact with the camera interior, immediately turn the camera power off and remove the battery.
If the battery charger becomes wet, unplug it from the outlet and consult your camera distributor or a Canon Customer Support Help Desk.

- **Use only the recommended battery.**
- **Do not place the battery near or in direct flame.**
- **Unplug the power cord periodically, and using a dry cloth, wipe away any dust and dirt that has collected on the plug, the exterior of the power outlet, and the surrounding area.**
- **Do not handle the power cord with wet hands.**
- **Do not use the equipment in a manner that exceeds the rated capacity of the electrical outlet or wiring accessories. Do not use if the power cord or plug are damaged, or not fully plugged into the outlet.**
- **Do not allow dirt or metal objects (such as pins or keys) to contact the terminals or plug.**

The battery may explode or leak, resulting in electrical shock or fire. This could cause injury and damage the surroundings. In the event that a battery leaks and the battery acid contacts eyes, mouth, skin or clothing, immediately flush with water.

- **Turn the camera off in places where camera use is prohibited.**

The electromagnetic waves emitted by the camera may interfere with the operation of electronic instruments and other devices. Exercise adequate caution when using the camera in places where use of electronic devices is restricted, such as inside airplanes and medical facilities.

- **Do not play the supplied CD-ROM(s) in any CD player that does not support data CD-ROMs.**

It is possible to suffer hearing loss from listening with headphones to the loud sounds of a CD-ROM played on a music CD player. Additionally, playing the CD-ROM(s) in an audio CD player (music player) could damage the speakers.

⚠ Caution Denotes the possibility of injury.

- **Be careful not to bang the camera or subject it to strong impacts or shocks when hanging it by the strap.**
- **Be careful not to bump or push strongly on the lens.**

This could lead to injury or damage the camera.

- **When using the flash, be careful not to cover it with your fingers or clothing.**

This could result in burns or damage to the flash.

- **Avoid using, placing or storing the product in the following places:**
  - **Places subject to strong sunlight**
  - **Places subject to temperatures above 40 °C (104 °F)**
  - **Humid or dusty areas**

These could cause leakage, overheating or an explosion of the battery, resulting in electrical shock, fire, burns or other injuries.
High temperatures may cause deformation of the camera or battery charger casing.

- **The slideshow transition effects may cause discomfort when viewed for prolonged periods.**

Caution Denotes the possibility of damage to the equipment.

- **Do not aim the camera at bright light sources (such as the sun on a clear day).**

Doing so may damage the image sensor.

- **When using the camera on a beach or at a windy location, be careful not to allow dust or sand to enter the camera.**

This may cause the product to malfunction.

- **In regular use, small amounts of smoke may be emitted from the flash.**

This is due to the high intensity of the flash burning dust and foreign materials stuck to the front of the unit. Please use a cotton swab to remove dirt, dust or other foreign matter from the flash to prevent heat build-up and damage to the unit.

- **Remove and store the battery when you are not using the camera.**

If the battery is left inside the camera, damage caused by leakage may occur.

- **Before you discard the battery, cover the terminals with tape or other insulators.**

Contacting other metal materials may lead to fire or explosions.

- **Unplug the battery charger from the power outlet after charging is complete, or when you are not using it.**
- **Do not place anything, such as cloth on top of the battery charger while it is charging.**

Leaving the unit plugged in for a long period of time may cause it to overheat and distort, resulting in fire.

- **Do not place the battery near pets.**

Pets biting the battery could cause leakage, overheating or explosion, resulting in fire or damage.

- **Do not sit down with the camera in your pocket.**

Doing so may cause malfunctions or damage the screen.

- **When putting the camera in your bag, ensure that hard objects do not come into contact with the screen.**
- **Do not attach any hard objects to the camera.**

Doing so may cause malfunctions or damage the screen.

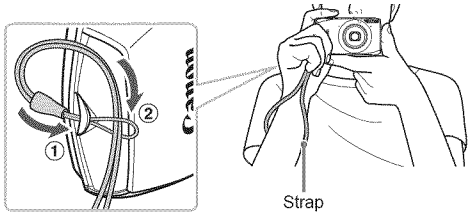
1

Getting Started

This chapter explains preparations before shooting, how to shoot in AUTO mode, and then how to view and erase the images you take. The latter part of this chapter explains how to shoot and view movies and transfer images to a computer.

Attaching the Strap/Holding the Camera

- Attach the included strap and wrap it around your wrist to avoid dropping the camera during use.
- Keep your arms tight against your body while holding the camera firmly by the sides when shooting. Be sure that your fingers do not block the flash or touch the screen.



Using the Touch Panel

This camera has a touch panel screen that allows you to perform operations with the touch of your finger.

Touch

Briefly touch the screen with your finger.

- Used for choosing icons or magnifying images.

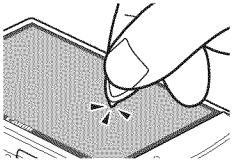
Drag

Touch and drag your finger across the screen.

- Used for playback operations such as switching to the next image, or moving the displayed location of magnified images.

Since the camera uses a pressure sensitive touch panel, the camera may not recognize touch operations if you install a screen protector.

What if I cannot perform operations well?

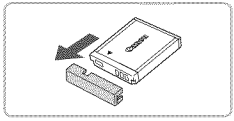


When touching with your finger does not work well, you can use the toggle attached to the strap to perform operations. Only use the attached toggle to perform operations. Do not use other objects, such as pens or pencils.

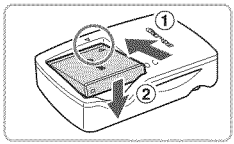
You can calibrate the touch panel if you are having difficulty choosing items or buttons (p. 170).

Charging the Battery

Use the included charger to charge the battery. Be sure to charge the battery as it is not charged at the time of purchase.

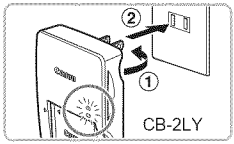


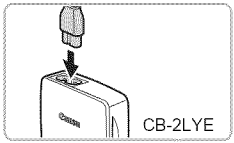
1 Remove the cover.



2 Insert the battery.

- Align the ▲ marks on the battery and charger, then insert the battery by sliding it in (①) and down (②).



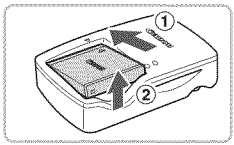


3 Charge the battery.

- **For CB-2LY:** Flip out the plug (①) and plug the charger into a power outlet (②).
- **For CB-2LYE:** Plug the power cord into the charger, then plug the other end into a power outlet.

▶ The charge lamp lights red and charging starts.

▶ The charge lamp will light green when charging has finished. Charging takes approx. 1 hour and 55 minutes.



4 Remove the battery.

- Unplug the battery charger from the power outlet, then remove the battery by sliding it in (①) and up (②).

To protect the battery and prolong its life, do not charge it for longer than 24 hours continuously.

Number of Possible Shots

Number of Shots	Approx. 180
Playback Time	Approx. 4 hours

- The number of shots that can be taken is based on the Camera & Imaging Products Association (CIPA) measurement standard.
- Under some shooting conditions, the number of shots that can be taken may be less than mentioned above.

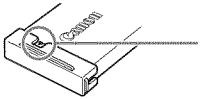
Battery Charge Indicator

An icon or message will appear on the screen indicating the battery's charge state.

Display	Summary
	Sufficient charge.
	Slightly depleted, but sufficient.
(Blinking red)	Nearly depleted. Charge the battery.
"Change the battery pack."	Depleted. Recharge the battery.

Using the battery and charger effectively

- Charge the battery on the day, or the day before, it will be used.
  Charged batteries continue to discharge naturally even if they are not used.



Attach the cover to a charged battery so that the ▲ mark is visible.

- How to store the battery for long periods:
  Deplete and remove the battery from the camera. Attach the terminal cover and store the battery. Storing a battery for long periods of time (about a year) without depleting it may shorten its life span or affect its performance.
- The battery charger can also be used when abroad.
  The charger can be used in regions that have 100 – 240 V (50/60 Hz) AC power. If the plug does not fit the outlet, use a commercially available plug adapter. Do not use electrical transformers for foreign travel as they will cause damage.
- The battery may develop a bulge.
  This is a normal characteristic of the battery and does not indicate a problem. However, if the battery bulges to the point where it will no longer fit into the camera, please contact a Canon Customer Support Help Desk.
- If the battery is quickly depleted even after charging, it has reached the end of its life span. Purchase a new battery.

Compatible Memory Cards (Sold Separately)

The cards below can be used without restrictions on their capacities.

- SD memory cards*
- SDHC memory cards*
- SDXC memory cards *
- MultiMediaCards
- MMC*plus* memory cards
- HC MMC*plus* memory cards
- Eye-Fi Cards

* This memory card complies with the SD standards. Some cards may not operate properly depending on the brand of card used.

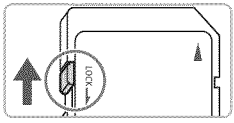
Depending on your computer's OS version, SDXC memory cards may not be recognized even when using a commercially available card reader. Check to make sure that your OS supports SDXC memory cards beforehand.

About Eye-Fi Cards

This product is not guaranteed to support Eye-Fi card functions (including wireless transfer). In case of an issue with an Eye-Fi card, please check with the card manufacturer.
Also note that an approval is required to use Eye-Fi cards in many countries or regions. Without approval, use of the card is not permitted. If it is unclear whether the card has been approved for use in the area, please check with the card manufacturer.

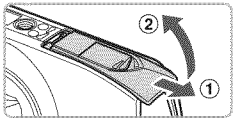
Inserting the Battery and Memory Card

Insert the included battery and a memory card (sold separately).



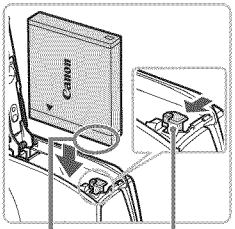
1 Check the card's write-protect tab.

If the memory card has a write-protect tab, you will not be able to record images if the tab is in the locked position. Slide the tab up until you hear a click.



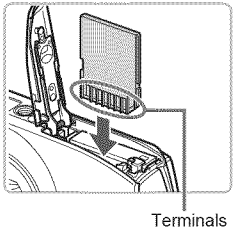
2 Open the cover.

Slide the cover (①) and open it (②).



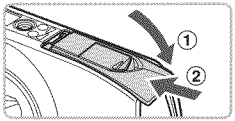
3 Insert the battery.

- Press the battery lock in the direction of the arrow, then insert the battery as shown until it locks into place with a click.
- Be sure to insert the battery in the correct direction or it will not properly lock into place.



4 Insert the memory card.

- Insert the memory card as shown until it locks into place with a click.
- Be sure the memory card is oriented correctly. Inserting the memory card in the wrong direction could damage the camera.



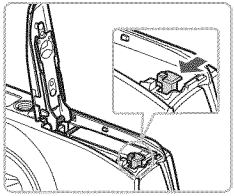
5 Close the cover.

- Close the cover (①), and press downward as you slide it until it clicks into place (②).

What if [Memory card locked] appears on the screen?

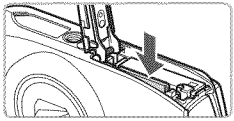
SD, SDHC, SDXC memory cards, and Eye-Fi cards have a write-protect tab. If this tab is in the locked position, [Memory card locked] will appear on the screen and you will not be able to take or erase images.

Removing the Battery and Memory Card



Remove the battery.

- Open the cover and press the battery lock in the direction of the arrow.
- The battery will pop up.



Remove the memory card.

- Push the memory card in until you hear a click, then slowly release it.
- The memory card will pop up.

Number of Shots per Memory Card

Memory Card	4 GB	16 GB
Number of Shots	Approx. 1231	Approx. 5042

- Values are based on the default settings.
- The number of shots that can be taken will vary depending on camera settings, the subject and the memory card used.

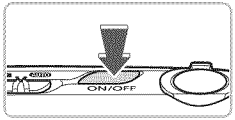
Can you check the number of shots that can be taken?

You can check the number of shots that can be taken when the camera is in a Shooting mode (p. 25).

Number of shots that can be taken

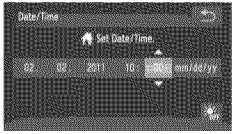
Setting the Date and Time

The Date/Time settings screen will appear the first time the camera is turned on. Since the dates and times recorded into your images are based on these settings, be sure to set them.



1 Turn on the camera.

- Press the power button.
- The Date/Time screen will appear.



2 Set the date and time.

- Touch the option you want to set.
- ▲▼ will appear.
- Touch ▲▼ to set a value.

3 Complete the setting.

- Touch ⮌.
- Once the date and time have been set, the Date/Time screen will close.
- Pressing the power button will turn off the camera.

Reappearing Date/Time screen

Set the correct date and time. If you have not set the date and time, the Date/Time screen will appear each time you turn on the camera.

Daylight saving time settings

If you touch ☀OFF in Step 2 and then choose ☀, you will set the time to daylight saving (1 hour ahead).

Changing the Date and Time

You can change the current date and time settings.

1 Display the menu.

- After touching FUNC., touch MENU.

2 Choose [Date/Time].

- Touch the tab.
- Drag up or down the screen to choose [Date/Time].
- Touch [Date/Time].

3 Change the date and time.

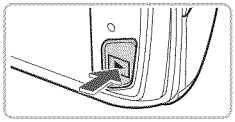
- Follow Steps 2 and 3 on p. 20 to adjust the setting.
- Touch ↩ twice to close the menu.

Date/Time battery

- The camera has a built-in date/time battery (backup battery) that allows the date/time settings to be retained for about three weeks after the battery pack has been removed.
- By inserting a charged battery or connecting an AC adapter kit (sold separately, p. 39) the date/time battery can be charged in about 4 hours even if the camera is not turned on.
- If the date/time battery is depleted, the Date/Time screen will appear when you turn the camera on. Follow the steps on p. 20 to set the date and time.

Setting the Display Language

You can change the language that displays on the screen.



1 Enter Playback mode.

- Press the ▶ button.

2 Display the settings screen.

- Touch and hold MENU.
- The settings screen will appear.

3 Set the display language.

- Touch a display language, then touch ⮌.
- Once the display language has been set, the settings screen will close.

What if MENU does not appear?

When there are images on the memory card, touch FUNC. on the lower left of the screen to display MENU.

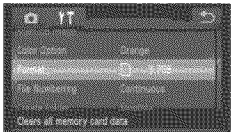
You can also change the display language by touching FUNC., then MENU. Choose the 🔧 tab in the screen that appears, then choose the [Language] menu item.

Formatting Memory Cards

Before you use a new memory card or one that has been formatted in other devices, you should format the card with this camera. Formatting (initializing) a memory card erases all data on the memory card. As you cannot retrieve the erased data, exercise adequate caution before formatting the memory card. Before formatting an Eye-Fi card (p. 179), be sure to install the software contained on the card to a computer.

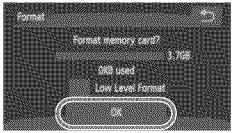
1 Display the menu.

- Touch FUNC., then touch MENU.



2 Choose [Format].

- Touch the tab.
- Drag up or down the screen to choose [Format].
- Touch [Format].

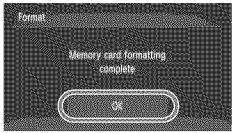


3 Choose [OK].

- Touch [OK].
- A confirmation screen will appear.

4 Format the memory card.

- Touch [OK].
- The memory card will be formatted.



5 Complete formatting.

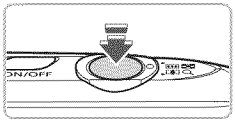
- When formatting ends, [Memory card formatting complete] will appear on the screen.
- Touch [OK].

Formatting or erasing data on a memory card merely changes the file management information on the card and does not ensure its contents are completely erased. Be careful when transferring or disposing of a memory card. When disposing of a memory card, take precautions such as physically destroying the card to prevent personal information leaks.

- The total capacity of the memory card displayed in the formatting screen may be less than indicated on the memory card.
- Perform a low-level format (p. 165) of the memory card when the camera does not operate properly, the recording/reading speed of a memory card has dropped, when continuous shooting speed slows down, or when movie recording stops suddenly.

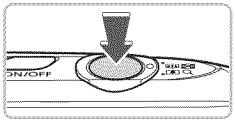
Pressing the Shutter Button

To take images that are in focus, be sure to first press the shutter button lightly (halfway) to focus, then press fully to shoot.



1 Press halfway (Press lightly to focus).

- Press lightly until the camera beeps twice and AF frames appear where the camera focused.



2 Press fully (Press fully to shoot).

- The camera plays the shutter sound and takes the shot.
- Since the shot is being taken while the shutter sound plays, be careful not to move the camera.

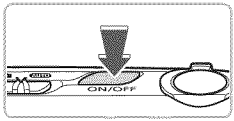
Does the length of the shutter sound change?

- Since the time required to shoot differs depending on the scene you want to take, the length of the shutter sound may change.
- If the camera or subject moves while the shutter sound is playing, the recorded image may be blurry.

If you shoot without pressing the shutter button halfway, the image may not be in focus.

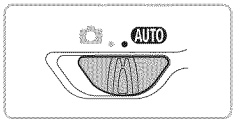
Taking Pictures (Smart Auto)

Since the camera can determine the subject and shooting conditions, you can let it automatically select the best settings for the scene and just shoot. The camera can also detect and focus on faces, setting the color and brightness to optimal levels.



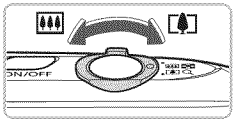
1 Turn on the camera.

- Press the power button.
- The start-up screen will appear.



2 Enter AUTO mode.

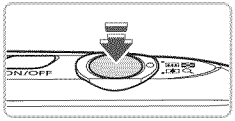
- Set the mode switch to AUTO.
- When you point the camera toward the subject, the camera will make a slight noise as it determines the scene.
- The icon for the determined scene will appear in the upper left of the screen.
- The camera will focus on detected subjects and display frames on them.
- Black bars will appear on the sides of the screen. These areas will not be recorded when shooting.



Zoom bar

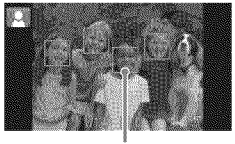
3 Compose the shot.

- Moving the zoom lever toward [🔍] (telephoto) will zoom in on your subject, making it appear larger. Moving the lever toward [▦] (wide angle) will zoom out from your subject, making it appear smaller. (The zoom bar showing the zoom position appears on the screen.)



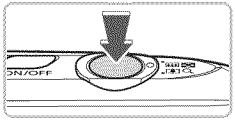
4 Focus.

- Press the shutter button halfway to focus.



AF Frame

- When the camera focuses, it will beep twice and AF frames will appear where the camera focused.
  Several AF frames will appear when the camera focuses on more than one point.



5 Shoot.

- Press the shutter button fully to shoot.
- The camera will play the shutter sound and shoot. The flash will automatically fire in low light conditions.
- The image will appear on the screen for approximately two seconds.
- You can take a second picture even while an image is displayed by pressing the shutter button again.

What if...

What if the color and brightness of the images do not turn out as expected?

The scene icon (p. 188) that appears on the screen may not match the actual scene. If this happens, try shooting in **P** mode (p. 83).

- **What if white and gray frames appear when you point the camera toward a subject?**
  A white frame appears on the face or subject that the camera detected as the main subject, while gray frames appear on other detected faces. The frames will follow the subjects within a certain range.
  If the subject moves, however, the gray frames will disappear, leaving only the white frame.
- **What if a frame does not appear on the subject you want to shoot?**
  The subject may not be detected, and frames may appear on the background. If this happens, try shooting in P mode (p. 83).
- **What if a blue frame appears when you press the shutter button halfway?**
  A blue frame appears when a moving subject is detected; the focus and exposure will continuously adjust (Servo AF).
- **What if a flashing appears?**
  Attach the camera to a tripod so that the camera does not move and blur the image.
- **What if the image comes out dark even if the flash fired when shooting?**
  The subject is too far away for the flash to reach. The effective flash range is approximately 50 cm – 5.0 m (1.6 – 16 ft.) at maximum wide angle, and approximately 50 cm – 2.0 m (1.6 – 6.6 ft.) at maximum telephoto.
- **What if the camera beeps once when the shutter button is pressed halfway?**
  Your subject may be too close. When the camera is at maximum wide angle, move about 3 cm (1.2 in.) or more away from your subject and shoot. Move about 40 cm (1.3 ft.) or more away when the camera is at maximum telephoto.
- **What if the lamp lights when the shutter button is pressed halfway?**
  To reduce red-eye and to assist in focusing, the lamp may light when shooting in dark areas.
- **What if the icon blinks when you try to shoot?**
  The flash is charging. You can shoot when recharging ends.
- **What if ND appears when the shutter button is pressed halfway?**
  When you press the shutter button halfway in extremely bright shooting conditions, ND will appear and the brightness will automatically adjust to appropriate levels.

What if an icon appears in the upper left of the screen?

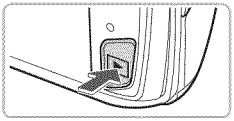
The icon for the determined scene will appear in the upper left of the screen. For details on the icons that appear, see “Scene Icons” (p. 188).

Choosing the subject to focus on (Touch AF)

After touching the subject and displaying , the focus and exposure will be maintained where the blue AF frame appears when you press the shutter button halfway (Servo AF). Press the shutter button fully to shoot.

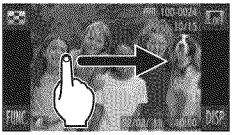
Viewing Images

You can view the images you have taken on the screen.



1 Enter Playback mode.

- Press the ▶ button.
- The last image you took will appear.



2 Choose an image.

- Dragging left to right across the screen will cycle through the images in the reverse order they were taken, from the newest image to the oldest.
- Dragging right to left across the screen will cycle through images in the order they were taken, from oldest to newest.
- If you touch the left edge of the screen (inside frame ① on the screen at the left), ◀ will appear and images will display in the reverse order they were taken, from the newest image to the oldest.
- If you touch the right edge of the screen (inside frame ② on the screen at the left), ▶ will appear and images will display in the order they were taken, from oldest to newest.
- The images change more quickly if you touch and hold ◀▶.
- The lens will retract after approximately 1 minute elapses.

- Pressing the ▶ button again while the lens is retracted will turn off the power.

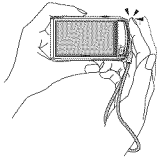
Switching to Shooting mode

Pressing the shutter button halfway while in Playback mode switches the camera to Shooting mode.

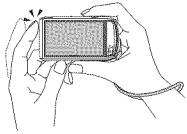
Active Display

When an image is displayed, lightly tapping the camera as shown below will switch to the next image.

- Be sure to put the strap around your wrist, and hold the camera firmly to avoid dropping it.
- Depending on the way you tap the camera, images may not switch.

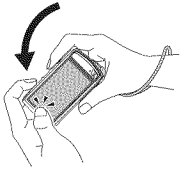


Switch to next image



Switch to previous image

Tilt the camera to switch images

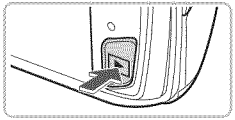


If you touch and hold ◀ on the left of the screen and tilt the camera as shown while switching through images (p. 28), the images advance quickly. Tilt the camera in the opposite direction while holding ▶.

While dragging an image, if you touch and hold ◀ or ▶ the image will appear coarse.

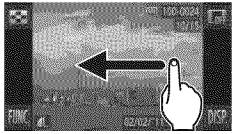
Erasing Images

You can choose and erase images one at a time. Please note that erased images cannot be recovered. Exercise adequate caution before erasing an image.



1 Enter Playback mode.

- Press the ▶ button.
- The last image you took will appear.

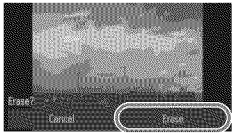


2 Choose an image to erase.

- Drag across the screen to choose an image.

3 Erase the image.

- After touching FUNC., drag up or down the screen to choose 🗑, then touch the menu item again.
- [Erase?] appears on the screen.

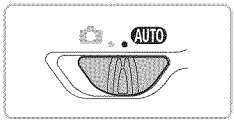


- Touch [Erase].
- The displayed image will be erased.
- To exit instead of erasing, touch [Cancel].

You can also use Touch Actions to erase images (p. 131).

Shooting Movies

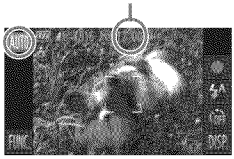
The camera will determine the subject and shooting conditions, and select the best settings for the scene. The audio will record in stereo.
If you continue shooting for a long time, the camera may become warm. This is not a malfunction.

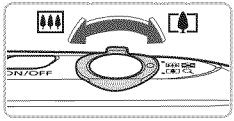


1 Choose AUTO mode.

- Set the mode switch to AUTO.

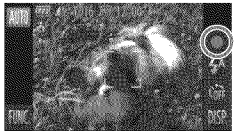
Remaining Time





2 Compose the shot.

- Moving the zoom lever toward [T] will zoom in on your subject, making it appear larger. Moving the lever toward [W] will zoom out from your subject, making it appear smaller.

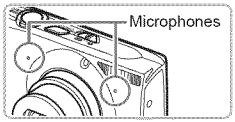


3 Shoot.

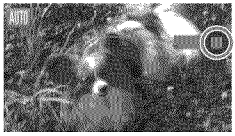
- Touch ●.

Elapsed Time

- The camera will beep once, recording will start, and [●Rec] and the elapsed time will appear on the screen.
- If you change the composition of your shot during shooting, the focus, brightness and tone will automatically adjust.



- Do not touch the microphones while shooting.
- Do not operate the camera other than touching ● while shooting. Operation sounds will be recorded in the movie.



4 Stop shooting.

- Touch ■.
- The camera will beep twice and stop shooting the movie.
- The movie will record to the memory card.
- Shooting will automatically stop when the memory card fills.

Zooming while shooting

Pressing the zoom lever while shooting will zoom in on or out from the subject. However, operation sounds will be recorded.

- When the mode switch is set to AUTO, the icon for the determined scene will appear (p. 188). "When Moving" icons will not appear, however. Under certain conditions, the icon that appears may not match the actual scene.
- If you change the composition while shooting and the white balance is not optimal, touch ■ to stop recording, then start recording again (only when the image quality is set to 1920 (p. 116)).
- Movies can be shot by touching ● even if the mode switch is set to 📷 (p. 111).

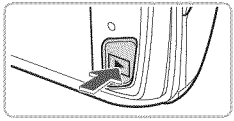
Shooting Time

Memory Card	4 GB	16 GB
Shooting Time	Approx. 14 min. 34 sec.	Approx. 59 min. 40 sec.

- Shooting times are based on default settings.
- Maximum clip length is approx. 10 minutes.
- Recording may stop even if the maximum clip length has not been reached on some memory cards. SD Speed Class 6 or higher memory cards are recommended.

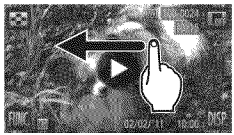
Viewing Movies

You can view the movies you have shot on the screen.



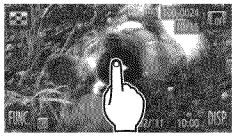
1 Enter Playback mode.

- Press the [▶] button.
- ▶ appears on movies.



2 Choose a movie.

- Drag across the screen to choose a movie to play back.



3 Play the movie.

- Touch ▶.
- The movie will play.
- If you touch the screen during playback, the movie will stop, and the movie control panel will appear on the screen.
- Drag up or down the screen during playback to adjust the volume.
- After the movie finishes, ▶ appears.

How can I play back movies on a computer?

Install the included software (p. 35).

- When watching a movie on a computer, frames may drop, it may not play smoothly, and the audio may stop suddenly depending on the computer's capabilities.
- If you use the supplied software to copy the movie back onto the memory card, you can play back the movie smoothly with the camera. For enhanced playback you can also connect the camera to a TV.

Transferring Images to a Computer for Viewing

You can use the included software to transfer images you have shot with the camera to a computer for viewing. If you are already using software included with another Canon-brand compact digital camera, install the software from the included CD-ROM, overwriting your current installation.

System Requirements

Windows

OS	Windows 7 Windows Vista Service Pack 1 and 2 Windows XP Service Pack 3
Computer model	The above OS should be pre-installed on computers with built-in USB ports.
CPU	Pentium 1.3 GHz or higher (still images), Core2 Duo 2.6 GHz or higher (movies)
RAM	Windows 7 (64 bit): 2 GB or more Windows 7 (32 bit), Windows Vista (64 bit, 32 bit): 1 GB or more (still images), 2 GB or more (movies) Windows XP: 512 MB or more (still images), 2 GB or more (movies)
Interface	USB
Free Hard Disk Space	ZoomBrowser EX: 200 MB or more CameraWindow: 150 MB or more* Movie Uploader for YouTube: 30 MB or more PhotoStitch: 40 MB or more
Display	1,024 x 768 pixels or higher

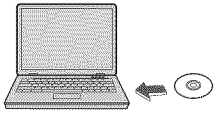
* For Windows XP, Microsoft .NET Framework 3.0 or later (max. 500 MB) must be installed. Installation may take some time depending on your computer's capabilities.

Macintosh

OS	Mac OS X (v10.5 – v10.6)
Computer model	The above OS should be pre-installed on computers with built-in USB ports.
CPU	Intel Processor (still images), Core 2 Duo 2.6 GHz or higher (movies)
RAM	Mac OS X v10.6: 1 GB or more (still images), 2 GB or more (movies) Mac OS X v10.5: 512 MB or more (still images), 2 GB or more (movies)
Interface	USB
Free Hard Disk Space	ImageBrowser: 250 MB or more CameraWindow: 150 MB or more Movie Uploader for YouTube: 30 MB or more PhotoStitch: 50 MB or more
Display	1,024 x 768 pixels or higher

Preparations

Windows Vista and Mac OS X (v10.5) are used for these explanations.



1 Install the Software.

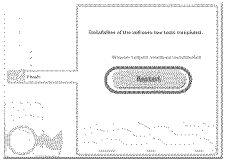
Windows

(1) Place the CD in the computer's CD-ROM drive.

- Place the supplied CD-ROM (DIGITAL CAMERA Solution Disk) (p. 2) into the computer's CD-ROM drive.

(2) Begin installation.

- Click [Easy Installation] and follow the on-screen instructions to proceed with the installation.
- If the [User Account Control] window appears, follow the on-screen instructions to proceed.



(3) When the installation finishes, click [Restart] or [Finish].

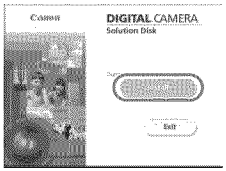
(4) Remove the CD-ROM.

- Remove the CD-ROM when your desktop screen appears.

Macintosh

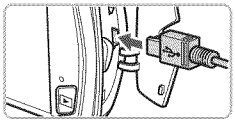
(1) Place the CD in the computer's CD-ROM drive.

- Place the supplied CD-ROM (DIGITAL CAMERA Solution Disk) (p. 2) into the computer's CD-ROM drive.



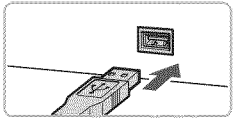
(2) Begin installation.

- Double-click the on the CD.
- Click [Install], and follow the on-screen instructions to proceed with the installation.

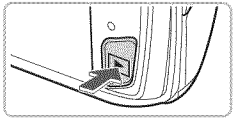


2 Connect the camera to the computer.

- Turn off the camera.
- Open the cover and insert the included interface cable's smaller plug (p. 2) firmly into the camera terminal in the direction shown.



- Insert the interface cable's larger plug into the computer. For connection details, refer to the user guide provided with the computer.



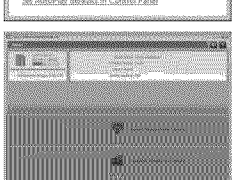
3 Turn on the camera.

- Press the ▶ button to turn on the camera.

4 Open CameraWindow.

Windows

- Click [Downloads Images From Canon Camera using Canon CameraWindow].
- CameraWindow will appear.
- If CameraWindow does not appear, click the [Start] menu and choose [All Programs], followed by [Canon Utilities], [CameraWindow] and [CameraWindow].

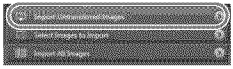


Macintosh

- CameraWindow will appear when you establish a connection between the camera and computer.
- If CameraWindow does not appear, click the CameraWindow icon on the Dock (the bar which appears at the bottom of the desktop).

For Windows 7, use the following steps to display CameraWindow.
① Click on the task bar.
② In the screen that appears, click the link to modify the program.
③ Choose [Downloads Images From Canon Camera using Canon CameraWindow] and click [OK].
④ Double click .

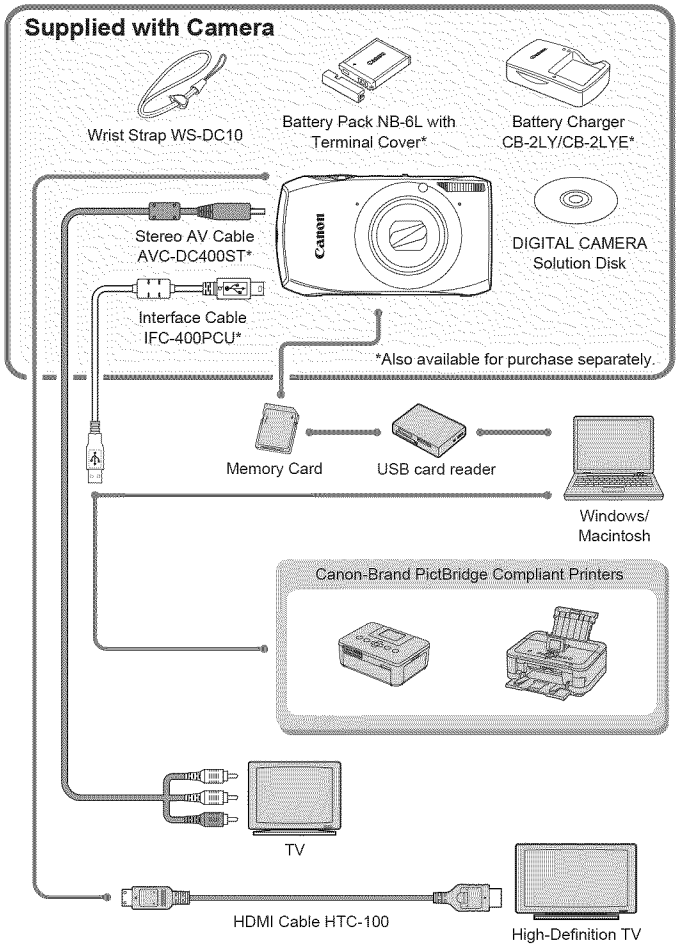
Transfer and View Images



- Click [Import Images from Camera], and then click [Import Untransferred Images].
- All images not previously transferred will transfer to the computer. Transferred images will be sorted by date and saved in separate folders in the Pictures folder.
- Close CameraWindow when image transfer is complete.
- Turn off the camera and unplug the cable.
- For details on how to view images using a computer, refer to the *Software Guide*.

You can transfer images even without using the image transfer function in the included software by simply connecting your camera to a computer. There are, however, the following limitations.
- It may take a few minutes from when you connect the camera to the computer until you can transfer images.
- Images shot in the vertical orientation may be transferred in the horizontal orientation.
- Protection settings for images may be lost when transferred to a computer.
- There may be problems transferring images or image information correctly depending on the version of the operating system in use, the file size, or the software in use.
- Some functions in the included software may not be available, such as editing movies, and transferring images to the camera.

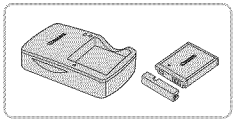
Accessories



Separately Sold Accessories

The following camera accessories are sold separately. Some accessories are not sold in some regions, or may no longer be available.

Power Supplies

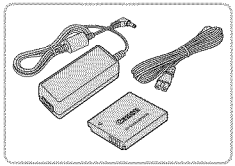


Battery Charger CB-2LY/CB-2LYE

- A charger for charging Battery Pack NB-6L.

Battery Pack NB-6L

- Rechargeable lithium-ion battery.



AC Adapter Kit ACK-DC40

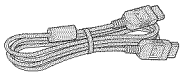
- This kit lets you power the camera using household power. Recommended for powering the camera for an extended period of time or when connecting to a computer or printer. Cannot be used to charge the camera battery.

Using accessories abroad

The battery charger and the AC adapter kit can be used in regions that have 100 – 240 V (50/60 Hz) AC power.
If the plug does not fit the outlet, use a commercially available plug adapter. Do not use electrical transformers for foreign travel as they will cause damage.

CAUTION
RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO LOCAL REGULATION.

Other Accessories



HDMI Cable HTC-100

- Use this cable to connect the camera to the HDMI™ terminal on a high-definition TV set.

Printers

SELPHY series

PIXMA series

Canon-Brand PictBridge Compliant Printers

- By connecting your camera to a Canon-brand PictBridge compliant printer, you can print your images without having to use a computer.
  For more information, visit your nearest Canon retailer.

Use of genuine Canon accessories is recommended.

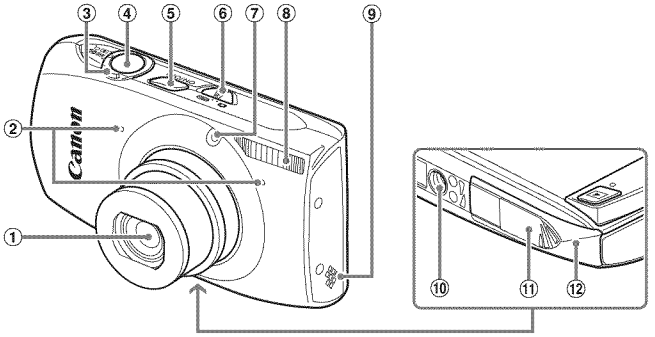
This product is designed to achieve excellent performance when used with genuine Canon accessories. Canon shall not be liable for any damage to this product and/or accidents such as fire, etc., caused by the malfunction of non-genuine Canon accessories (e.g., a leakage and/or explosion of a battery pack). Please note that this warranty does not apply to repairs arising out of the malfunction of non-genuine Canon accessories, although you may request such repairs on a chargeable basis.

2

Learning More

This chapter explains the parts of the camera and what appears on the screen, as well as the basic operating instructions.

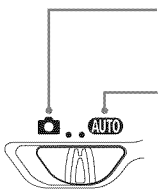
Components Guide



① Lens
② Microphones (p. 32)
③ Zoom Lever
Shooting: (Telephoto) / (Wide Angle) (pp. 26, 31, 55)
Playback: (Magnify) / (Index) (pp. 120, 127)
④ Shutter Button (p. 24)
⑤ Power Button (p. 20)
⑥ Mode Switch
⑦ Lamp (pp. 58, 78, 171)
⑧ Flash (pp. 54, 85)
⑨ Speaker
⑩ Tripod Socket
⑪ DC Coupler Terminal Cover
⑫ Memory Card / Battery Cover (p. 17)

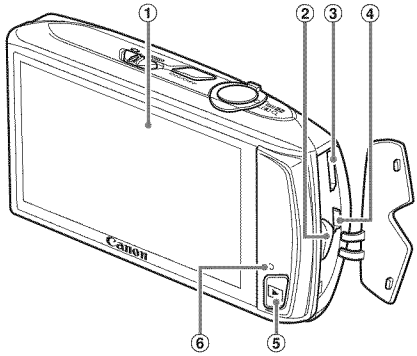
Mode Switch

Use the mode switch to change the Shooting mode.



You can shoot with the best settings for the scene (p. 64) or choose settings yourself to take various types of pictures (pp. 53, 83).

You can leave it to the camera to select settings for fully automatic shooting (p. 25).



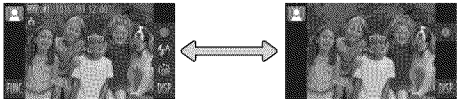
① Screen (LCD Monitor) (pp. 44, 187, 189)
② Strap Mount (p. 13)
③ HDMI Terminal (p. 134)
④ A/V OUT (Audio/Video Output) / DIGITAL Terminal (pp. 36, 133, 152)
⑤ ▶ (Playback) Button (pp. 28, 119)
⑥ Indicator (p. 45)

Screen Display

Switching the Display

You can change the screen display by touching DISP.. Refer to p. 187 for details on information that appears on the screen.

Shooting



Information Display | No Information Display

Playback

Simple Information Display | Detailed Information Display | Focus Check Display (p. 126)

- Touching OFF while in Playback mode will hide all image information and icons, but you can still switch images (pp. 28, 29). Touch the screen to restore the original display.
- You can also switch the display by touching DISP. while the image displays right after shooting. However, Simple Information Display is not available, and image information will not display. You can change the first screen that displays by choosing the tab, then [Review Info] (p. 172).

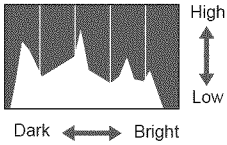
Screen Display in Dark Shooting Conditions

The display automatically brightens when shooting in dark conditions, allowing you to check the composition (Night Display function). However, the brightness of the image on the screen, and the brightness of the actual image recorded may be different. Screen noise may appear and the movement of the subject may appear somewhat jagged on the screen. This has no effect on the recorded image.

Overexposure Warning during Playback

In Detailed Information Display (p. 44), overexposed areas of the image flash on the screen.

Histogram during Playback



The graph that appears in Detailed Information Display (p. 189) is called the histogram. The histogram shows the distribution of brightness in an image horizontally, and the amount of brightness vertically. When the graph approaches the right side, the image is bright, but when it approaches the left side, the image is dark, and in this way you can judge the exposure.

Indicator

The indicator on the back of the camera (p. 43) will light or blink depending on the camera's status.

Colors	Status	Operation Status
Green	Lights	Connected to a computer (p. 36)/Display off (p. 169)
	Blinks	During camera start-up, Recording/Reading/Transmitting image data

When the indicator blinks green, do not turn off the power, open the memory card slot/battery cover, shake or jolt the camera. These actions may corrupt the image data or cause the camera or memory card to malfunction.

FUNC. Menu – Basic Operations

Commonly used functions can be set with the FUNC. menu.
The menu items and options differ depending on the Shooting mode (pp. 192 – 195) or Playback mode (p. 200).

1 Display the FUNC. menu.

- Touch FUNC..

2 Choose a menu item.

- Drag up or down the menu on the left, or touch a menu item to choose it.
- You can also choose menu items by dragging on the screen outside of the menu.
- Touch the menu item you chose again, or touch the menu on the right.

3 Choose an option.

- Drag up or down the menu on the right, or touch an item to choose it.
- You can also choose menu items by dragging on the screen outside of the menu.
- Touch the menu item you chose again, or touch ↩.
- The item will be set, and the original screen will reappear.
- To choose a different item from the menu on the left, touch the appropriate item.
- In the screen in Step 2, you can also touch items to choose them in the menu to the right.

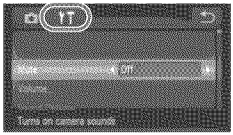
The options on the right will not appear if you have selected any of the following items from the FUNC. menu while in Playback mode: (p. 144), (p. 159), (p. 137), ★ (p. 141), (p. 30), (p. 122), (p. 130), (p. 143).

MENU – Basic Operations

Various functions can be set from the menus. The menu items are organized under tabs, such as for shooting (📷) and playback (▶). The options differ depending on the Shooting mode and the Playback mode (pp. 196 – 199).

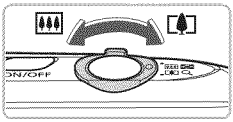
1 Display the menu.

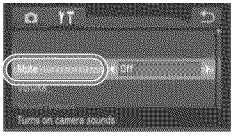
- Touch FUNC., then touch MENU.



2 Choose a tab.

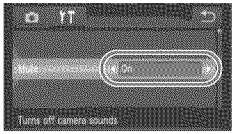
- Touch a tab, or move the zoom lever (p. 42) left or right to choose a tab.





3 Choose an item.

- Drag up or down the screen, or touch an item to choose it.
- Some items require you to touch the item to display a submenu in which you change the setting.



4 Choose an option.

- For items that display ◀▶ to the left and right, touch ◀▶ to change settings.
- For items that display a bar, touch the spot on the bar where you want to make the setting.

5 Complete the setting.

- Touch ⮌.

▶ The normal screen will reappear.

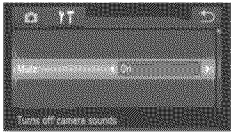
Changing the Sound Settings

You can silence or adjust the volume of camera sounds.

Muting Sounds

1 Display the menu.

- Touch FUNC., then touch MENU.



2 Choose [Mute].

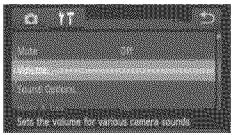
- Touch the tab.
- Drag up or down the screen to choose [Mute], then touch ◀▶ to choose [On].

If you mute camera sounds, the sound will also be muted when playing back movies (p. 33). If you drag up the screen while viewing a movie, the sound will turn on. You can then adjust the volume by dragging up or down the screen.

Adjusting the Volume

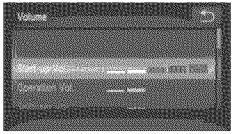
1 Display the menu.

- Touch FUNC., then touch MENU.



2 Choose [Volume].

- Touch the tab.
- Drag up or down the screen to touch [Volume].



3 Change the volume.

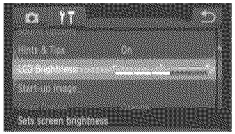
- Drag up or down the screen to choose an item, then touch the point on the bar where you want to change the volume.

Adjusting the Screen Brightness

You can adjust the brightness of the screen.

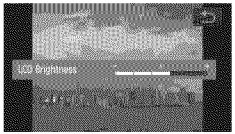
1 Display the menu.

- Touch FUNC., then touch MENU.



2 Choose [LCD Brightness].

- Touch the tab.
- Drag up or down the screen to choose [LCD Brightness].



3 Adjust the brightness.

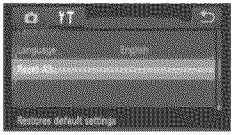
- Touch the point on the bar where you want to change the brightness.

Returning the Camera to Default Settings

When you have mistakenly changed a setting, you can reset the camera to the default settings.

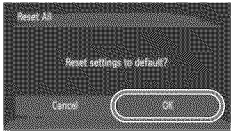
1 Display the menu.

- Touch FUNC., then touch MENU.



2 Choose [Reset All].

- Touch the tab.
- Drag up or down the screen to touch [Reset All].



3 Reset the settings.

- Touch [OK].
- The camera will reset to the default settings.

Are there functions that cannot be reset?

- The [Date/Time] (p. 21), [Language] (p. 22), [Video System] (p. 133), [Time Zone] (p. 169), the image registered in [Start-up Image] (p. 166), and [Calibration] (p. 170) in the tab.
- The recorded custom white balance data (p. 87).
- Colors that were chosen in Color Accent (p. 72) or Color Swap (p. 73).
- Shooting modes set when the mode switch was set to (pp. 63, 111).

Power Saving Function (Auto Power Down)

To save battery power, the screen turns off, and the camera shuts down automatically when it is not operated for a certain time.

Power Saving during Shooting

The screen will turn off approximately 1 minute after you stop operating the camera. After about 2 more minutes, the lens will retract and the power will turn off. When the screen has turned off but the lens has not yet retracted, pressing the shutter button halfway (p. 24) turns on the screen and shooting can continue.

Power Saving during Playback

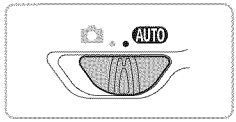
The power will turn off approximately 5 minutes after you stop operating the camera.

- You can turn off the power saving function (p. 168).
- You can adjust the time before the screen turns off (p. 169).

3

Shooting with Commonly Used Functions

This chapter explains how to use common functions, such as the self-timer, and how to turn off the flash.



- This chapter assumes that the camera is set to AUTO mode. When shooting in another mode, check which functions are available in that mode (pp. 192 – 195).

Turning the Flash Off

You can shoot with the flash turned off.

1 Touch ⚡^{A}.

2 Choose ⊗.

- Touch ⊗.
- Touch ⊗ again to make the setting.
- Once set, ⊗ will appear on the screen.
- To turn the flash back on, follow the steps above to choose ⚡^{A}.

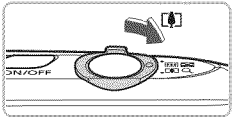
What if a flashing appears?

When you press the shutter button halfway in low light conditions where camera shake is likely, a flashing will appear on the screen. Attach the camera to a tripod to prevent it from moving.

You can also choose items by touching in Step 2.

Zooming in More Closely on Subjects (Digital Zoom)

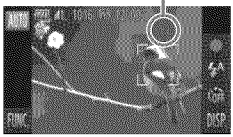
You can use the digital zoom to zoom up to approximately 18x maximum, and capture subjects that are too far away for the optical zoom to enlarge. However, depending on the recording pixel setting (p. 60) and zoom factor, the images may appear coarse (the zoom factor will appear in blue).



1 Move the zoom lever toward [🔍].

- Hold the lever until zooming stops.
- Zooming stops at the largest possible zoom factor without image deterioration. The zoom factor will appear on the screen when you release the zoom lever.

Zoom Factor



2 Move it toward [🔍] again.

- The digital zoom will zoom in even further on the subject.

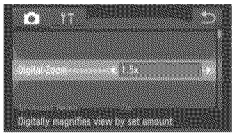
Turning off the digital zoom

To turn off the digital zoom, touch FUNC., then touch MENU to choose the 📷 tab, and choose [Digital Zoom] and the [Off] option.

The focal length when using the optical zoom and digital zoom together is approximately 24 – 420 mm, and 24 – 105 mm when using the optical zoom alone (all focal lengths are 35mm film equivalent).

Digital Tele-Converter

The focal length of the lens can be increased by approximately 1.5x or approximately 2.0x. This enables a faster shutter speed and less chance of camera shake than the zoom (including digital zoom) used by itself at the same zoom factor.
However, a recording pixel setting (p. 60) of L or M1 will cause images to appear coarse (the zoom factor will appear in blue).



1 Choose [Digital Zoom].

- Touch FUNC., then touch MENU.
- Touch the tab.
- Drag up or down the screen to choose [Digital Zoom].

2 Choose the setting.

- Touch ◀▶ to choose a zoom factor.
- Touching ⮌ restores the settings screen.
- The view will be enlarged and the zoom factor will appear on the screen.
- To return to standard digital zoom, choose [Digital Zoom] and the [Standard] option.

- The respective focal lengths when using [1.5x] and [2.0x] are approximately 36.0 – 157.5 mm and approximately 48.0 – 210.0 mm (35mm film equivalent).
- The digital tele-converter cannot be used together with the digital zoom.
- The shutter speeds may be the same when at maximum telephoto [T], and when zoomed in on the subject using Step 2 on p. 55.

Inserting the Date and Time

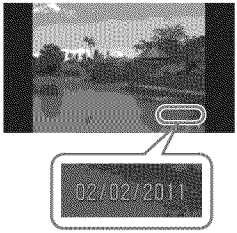
You can insert the shooting date and time in the lower right corner of an image. Once inserted, however, they cannot be deleted. Be sure to check beforehand that the date and time are correctly set (p. 20).

1 Choose [Date Stamp].

- Touch FUNC., then touch MENU.
- Touch the tab.
- Drag up or down the screen to choose [Date Stamp].

2 Choose the setting.

- Touch ◀▶ to choose [Date] or [Date & Time].
- Touching ⮌ restores the settings screen.
- Once set, [DATE] will appear on the screen.



3 Shoot.

- The shooting date or time will be recorded in the image's lower right corner.
- To restore to the original setting, choose [Off] in Step 2.

You can insert and print the shooting date in images which do not have an embedded date and time as follows. However, if you do this for images with an embedded date and time, the date and time may be printed twice.

- **Use the DPOF print settings (p. 159) to print.**
- **Use the included software to print.**
  Refer to the *Software Guide* for details.
- **Print using printer functions (p. 151).**

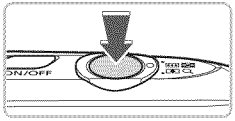
Using the Self-Timer

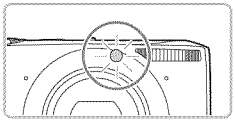
The self-timer can be used to shoot a group photo that includes the photographer. The camera will shoot approximately 10 seconds after the shutter button is pressed.

1 Touch ⏲OFF.

2 Choose ⏲10.

- Touch ⏲10.
- Touch ⏲10 again to make the setting.
- Once set, ⏲10 will appear on the screen.





3 Shoot.

- Press the shutter button halfway to focus on the subject, then press it fully.
- When the self-timer starts, the lamp blinks and the self-timer sound plays.
- Two seconds before the shutter releases, the lamp and sound speed up (the lamp remains lit when the flash will fire).
- To cancel shooting with the timer after countdown has started, touch the screen.
- To restore the original setting, choose ⏲OFF in Step 2.

- You can also choose items by touching 🔁 in Step 2.
- You can change the delay and number of shots (p. 59).
- You can also make settings in the FUNC. menu that appears when you touch FUNC..

Using the Self-Timer to Prevent Camera Shake

The camera will shoot approximately 2 seconds after the shutter button is pressed, preventing any camera shake that occurs when pressing the shutter button.

Choose ⏲2.

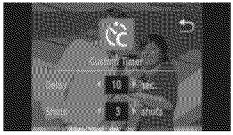
- Follow Steps 1 – 2 on p. 58 to choose ⏲2.
- Once set, ⏲2 will appear on the screen.
- Follow Step 3 on p. 58 to shoot.

Customizing the Self-Timer

You can set the delay (0 – 30 seconds) and the number of shots (1 – 10 shots).

1 Choose ⏲C.

- Touch ⏲OFF and ⏲C, then immediately touch [Settings].



2 Choose the settings.

- Touch ◀▶ to choose a value for the desired option.
- Touch ⮌ to make the setting.
- Follow Step 3 on p. 58 to shoot.

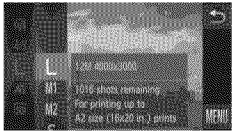
What if the number of shots is set to two or more shots?

- Exposure and white balance settings are set with the first shot.
- If the flash fires or you set a high number of shots, the shooting interval may take longer than usual.
- If the memory card fills, shooting stops automatically.

When you set the delay for more than 2 seconds, the lamp and self-timer sound speed up 2 seconds before the shutter releases (the lamp remains lit when the flash will fire).

Changing the Recording Pixel Setting (Image Size)

You can choose from 4 recording pixel settings.



1 Choose the recording pixel setting.

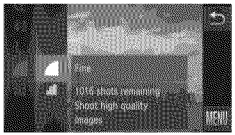
- Touch FUNC., then drag up or down the menu on the left to choose L.

2 Choose an option.

- Touch an item you want to set.
- If you drag up or down the menu on the right, other items will appear.
- Touch the menu item again to complete the setting.
- The setting will appear on the screen.
- To restore to the original setting, choose L in Steps 1 – 2.

Changing the Compression Ratio (Image Quality)

You can choose from the following 2 compression ratios (image quality): ◢ (Fine), ◢ (Normal).



1 Choose the compression ratio setting.

- Touch FUNC., then drag up or down the menu on the left to choose ◢.

2 Choose an option.

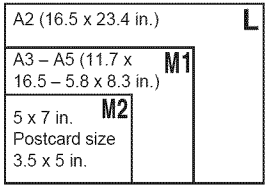
- Touch an item you want to set.
- Touch the menu item again to complete the setting.
- The setting will appear on the screen.
- To restore the original setting, choose ◢ in Steps 1 – 2.

Approximate Values for Recording Pixels and Compression Ratio (for 4:3 Aspect Ratios)

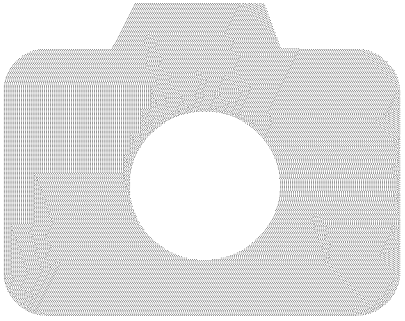
Recording Pixels	Compression Ratio	Single Image Data Size (Approx. KB)	Number of Shots per Memory Card (Approx. shots)	
			4 GB	16 GB
L (Large) 12M/4000x3000		3084	1231	5042
		1474	2514	10295
M1 (Medium 1) 6M/2816x2112		1620	2320	9503
		780	4641	19007
M2 (Medium 2) 2M/1600x1200		558	6352	26010
		278	12069	49420
S (Small) 0.3M/640x480		150	20116	82367
		84	30174	123550

- The values in the table are measured according to Canon standards and may change depending on the subject, memory card and camera settings.
- The values in the table are based on 4:3 aspect ratio. If the aspect ratio is changed (p. 90), more images can be shot because the data size per image will be smaller than with 4:3 images. However, since **M2** 16:9 images have a setting of 1920 x 1080 pixels, their data size will be larger than 4:3 images.

Approximate Values for Paper Size (for 4:3 Aspect Ratios)



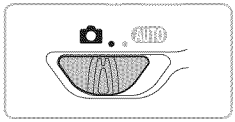
S For sending images as e-mail attachments.



4

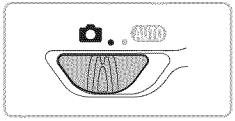
Adding Effects and Shooting in Various Conditions

This chapter explains how to add effects and how to shoot in various conditions.



Shooting in Various Conditions

The camera will select the necessary settings for the conditions in which you wish to shoot when you choose the matching mode.

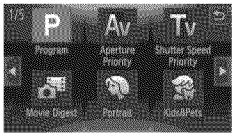


1 Set the camera to mode.

- Set the mode switch to .

2 Choose a Shooting mode.

- Touch P.



- If you touch ◀▶ or quickly drag left or right across the screen, other Shooting modes will appear.
- Choose the desired shooting mode.

- An explanation of the chosen Shooting mode appears on the screen.
- Touch [OK] to complete the setting.
- Touch ↩ to restore the Shooting mode selection screen.

3 Shoot.

Take portraits (Portrait)

- Produces a soft effect when photographing people.

Take shots of kids and pets (Kids&Pets)

- Lets you capture subjects that move around, such as children and pets, without missing photo opportunities.
- Move approximately 1 m (3.3 ft.) or more away from your subject and shoot.

Take nightscapes without using a tripod (Handheld NightScene)

- Lets you take beautiful snapshots of city nightscenes by combining several continuous shots to reduce camera shake and noise.
- When using a tripod, you should shoot in AUTO mode (p. 25).

Take shots in low light conditions (Low Light)

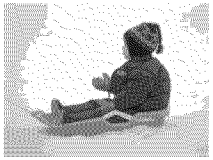
- Lets you take shots in dark places with reduced camera shake and subject blur.

Take shots of people at the beach (Beach)

- Lets you take shots of brightly lit people on sandy beaches where the reflected sunlight is strong.

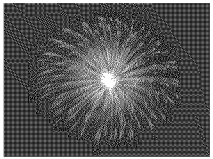
Take shots of foliage (Foliage)

- Lets you shoot trees and leaves, such as new growth, autumn leaves or blossoms, in vivid colors.



Take shots of people in snow (Snow)

Lets you take bright, natural-colored shots of people against snowy backgrounds.



Take shots of fireworks (Fireworks)

Lets you take shots of fireworks in vivid colors.

- In mode, hold the camera firmly while shooting as multiple images are captured in succession.
- In mode, attach the camera to a tripod to prevent the camera from moving and blurring the image. Additionally, you should set [IS Mode] to [Off] when shooting with a tripod (p. 173).

- In mode, the recording pixel setting will be fixed at M (1984 x 1488 pixels).
- In or mode, images may appear coarse because the ISO speed (p. 88) is increased to match the shooting conditions.
- If camera shake is too strong while shooting in mode, the camera may not be able to combine images or you may not obtain the expected result depending on shooting conditions.

Making Short Movies Automatically (Movie Digest)

You can make a short movie of a day just by taking still images.
Each time you take a picture, the scene just before taking your shot will be recorded as a movie. All the movies recorded that day will be saved as a single file.

1 Choose .

- Follow Steps 1 – 2 on p. 64 to choose .

2 Shoot.

- Press the shutter button fully to shoot a still image.
- A movie of approx. 2 – 4 sec. will be recorded just before the image is taken.

What if a movie is not recorded?

If you take a picture just after turning on the camera, selecting mode or otherwise operating the camera, a movie may not be recorded.

Viewing movies made with Movie Digest

You can select movies made in mode by date for viewing (p. 122).

- Since you are also shooting movies when you shoot still images, the battery will be depleted more quickly than in .
- The image quality will be fixed at for movies shot in mode.
- In the following cases, movies will be saved as separate files even if they were shot on the same day with mode.
  - If the clip file size reaches 4 GB or the recording time reaches approximately 1 hour
  - If the movie is protected (p. 137)
  - If the Time Zone setting is changed (p. 169)
  - If a new folder is created (p. 168)
- If you operate the camera while shooting a movie, the sounds made will be recorded in the movie.
- The camera will not play sounds, such as when pressing the shutter button halfway, using the controls or the self-timer (p. 164).

Adding Effects and Shooting

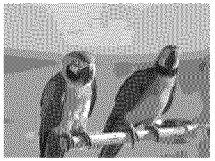
You can add various effects to images when shooting.

1 Choose a Shooting mode.

- Follow Steps 1 – 2 on p. 64 to choose a Shooting mode.

2 Shoot.

Since you may not achieve the expected results with images shot in , , , , and modes, try taking some test shots first.



Shoot images with vivid colors (Super Vivid)

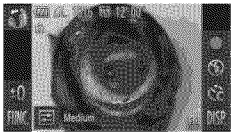
- Lets you take shots with vivid, intense colors.

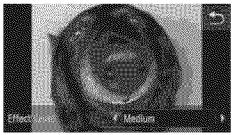
Take posterized shots (Poster Effect)

- Lets you take shots that look like an old poster or illustration.

Shoot with the Effects of a Fish-Eye Lens (Fish-eye Effect)

Lets you shoot with the distorting effect of a fish-eye lens.





1 Choose .

- Follow Steps 1 – 2 on p. 64 to choose .

2 Choose an effect level.

- Touch .
- [Effect Level] will appear on the screen.
- Touch ◀▶ to choose an effect level, then touch ↩.
- You can check the effect on the screen.

3 Shoot.

Take Shots That Look Like a Miniature Model (Miniature Effect)

Blurs chosen portions in the top and bottom of an image to produce the effect of a miniature model.

1 Choose .

- Follow Steps 1 – 2 on p. 64 to choose .
- A white frame (the area that will not be blurred) appears on the screen.

2 Choose the area to keep in focus.

- Touch the screen or drag the white frame up or down to change the area to keep in focus.
- Touch , then touch , or to change the size of the focused area and touch .

3 Shoot.

- If you touch in Step 2, the frame will switch to vertical orientation. You can change the area to keep in focus by touching the screen or dragging the white frame left or right. Touch again to return the frame orientation to horizontal.
- Holding the camera vertically will change the orientation of the frame.
- Be sure to set a playback speed before shooting a Miniature Effect movie (p. 113).

Special Effects for Night Backgrounds (Creative Light Effect)

Light displays and other points of light in the night backgrounds behind your subject can be changed into 6 different shapes. Be sure to use the flash when shooting.

1 Choose .

- Follow Steps 1 – 2 on p. 64 to choose .

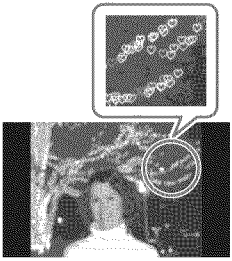
2 Choose a shape and size.

- Touch ☆.

▶ [Select Effect] will appear on the screen.

- Touch the desired shape.
- Touch ▲▼ to choose a size, then touch ⮌.

3 Shoot.



Shooting tips

- Hold the camera firmly and shoot non-moving points of light in as dark a location as possible.
- Make sure your subject is within the range of the flash (p. 85). Also make sure the subject is not illuminated by any other light sources.

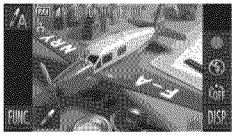
In some shooting conditions, such as when shooting moving points of light, the chosen shape may not show, and the brightness may be different than expected.

Changing the Color and Shooting

You can change the look of an image when shooting. However, depending on shooting conditions, the image may become coarse, or the colors may not come out as expected.

Color Accent

You can choose to retain a single color and change the rest to black and white in a composition.

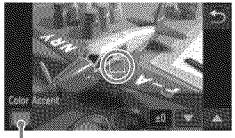


1 Choose ^{A}.

- Follow Steps 1 – 2 on p. 64 to choose ^{A}.

2 Touch .

- The unchanged image and the Color Accent image will alternately display.
- The color for default settings is green.



Recorded color

3 Specify the color.

- Position the center frame so it is filled with the color you want and touch the frame on the lower part of the screen.
- The specified color will be recorded.

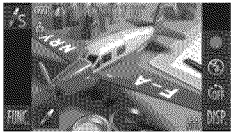
4 Specify the range of colors.

- Touch ▲▼ to change the range of colors to be retained.
- Choose a negative value to limit the range of colors. Choose a positive value to extend the range of colors to similar colors.
- Touching ⮌ restores the shooting screen.

Using the flash may cause unexpected results in this mode.

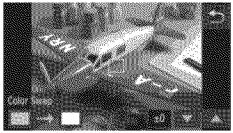
Color Swap

You can swap one color in an image for another when recording it. You can only swap one color.



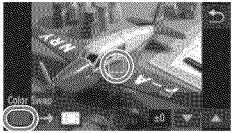
1 Choose ✎S.

- Follow Steps 1 – 2 on p. 64 to choose ✎S.



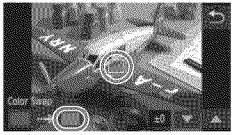
2 Touch ✎.

- The unchanged image and the Color Swap image will alternately display.
- The default setting is to change green to gray.



3 Specify the color to be swapped.

- Position the center frame so it is filled with the color you want and touch the left frame that appears in the lower left of the screen.
- The specified color will be recorded.



4 Specify the target color.

- Position the center frame so it is filled with the color you want and touch the right frame that appears in the lower left of the screen.
- The specified color will be recorded.

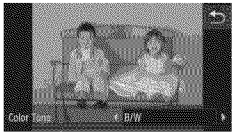
5 Specify the range of colors to be swapped.

- Touch ▲▼ to change the range of colors to be retained.
- Choose a negative value to limit the range of colors. Choose a positive value to extend the range of colors to similar colors.
- Touching ⮌ restores the shooting screen.

- Using the flash may cause unexpected results in this mode.
- Under some conditions, the image may appear coarse.

Shooting in Monochrome

You can shoot images in black and white, sepia or blue and white.



1 Choose ◪.

- Follow Steps 1 – 2 on p. 64 to choose ◪.

2 Choose a color tone.

- Touch [Color Tone].
- [Color Tone] will appear on the screen.
- Touch ◀▶ to choose an effect, then touch ↩.
- You can check the color tone on the screen.

3 Shoot.

B/W	Shoots in black and white.
Sepia	Shoots with sepia tones.
Blue	Shoots in blue and white.

Shoot with the Effects of a Toy Camera (Toy Camera Effect)

This effect darkens and blurs the corners of the image, and changes the overall color so that it looks like an image shot with a toy camera.

1 Choose 📷.

- Follow Steps 1 – 2 on p. 64 to choose 📷.

2 Choose a color tone.

- Touch 🎚.
- [Color Tone] will appear on the screen.

- Touch ◀▶ to choose an effect, then touch ⮌.
- You can check the color tone on the screen.

3 Shoot.

Standard	Images will look like they were shot with a toy camera.
Warm	Gives images a warmer tone than [Standard].
Cool	Gives images a cooler tone than [Standard].

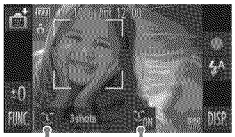
Detecting a Face and Shooting (Smart Shutter)

Detecting a Smile and Shooting

The camera will shoot, even without pressing the shutter button, when it detects a smile.

1 Choose .

- Choose in Steps 1 – 2 on p. 64, then touch .
- Touch , then touch .
- The camera will enter shooting preparation.



Smile detection: On/Off

Number of shots, switching modes (pp. 77, 78)

2 Point the camera at a person.

- Each time the camera detects a smile it will shoot after the lamp lights.
- Touching will pause smile detection. Touch to resume smile detection.

What if a smile is not detected?

Smiles are easier to detect if the subject faces the camera, and opens their mouth enough to show some teeth when smiling.

Changing the number of shots

Touch , then touch ▲▼ to choose the number of shots. Touch to change the setting.

- You should switch to another mode when you finish shooting, or the camera will continue taking shots each time the camera detects a smile.
- You can also shoot by pressing the shutter button.

Using the Wink Self-Timer

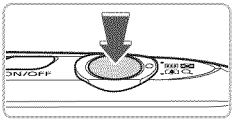
Point the camera at a person and press the shutter button fully. The camera will shoot approximately two seconds after it detects a wink.

1 Choose .

- Choose in Steps 1 – 2 on p. 64, then touch .
- Touch , then touch .

2 Compose the shot and press the shutter button halfway.

- Touch a face displayed on the screen to choose a person to wink (Touch AF).
- Confirm that a green frame appears around the face of the person who will wink.



3 Press the shutter button fully.

- The camera will enter shooting stand-by, and [Wink to take picture] will appear on the screen.
- The lamp will blink and the self-timer sound will play.

4 Face the camera and wink.

- The shutter will release approximately 2 seconds after a wink is detected from the person inside the frame.
- To cancel shooting with the timer after countdown has started, touch the screen.

What if a wink is not detected?

- Wink a bit slowly.
- A wink may not be detected if eyes are covered by hair or a hat, or when wearing glasses.

Changing the number of shots

After touching on the screen in Step 1, touch ▲▼ to change the number of shots. Touch ↩ to complete the setting.

- Shutting both eyes will also be detected as a wink.
- If a wink is not detected, the shutter will release approximately 15 seconds later.
- If there are no people in the shot when the shutter button is pressed fully, the camera will shoot after a person enters the shot and winks.

Using the Face Self-Timer

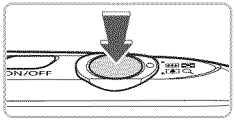
The shutter will release approximately two seconds after the camera detects a new face (p. 95). You can use this when the photographer wants to be in the image, such as a group photo.

1 Choose .

- Choose in Steps 1 – 2 on p. 64, then touch .
- Touch , then touch ↩.

2 Compose the shot and press the shutter button halfway.

- Make sure a green frame appears on the face focused on and white frames appear on other faces.



3 Press the shutter button fully.

- The camera will enter shooting stand-by, and [Look straight at camera to start count down] will appear on the screen.
- The lamp will blink and the self-timer sound will play.

4 Join the subjects and look at the camera.

- When the camera detects a new face, the lamp and self-timer sound will speed up (the lamp remains lit when the flash will fire), and two seconds later the shutter will release.
- To cancel shooting with the timer after countdown has started, touch the screen.

Changing the number of shots

After touching in the screen in Step 1, touch ▲▼ to change the number of shots, then touch ↩ to complete the setting.

Even if your face is not detected after joining the subjects, the shutter will release approximately 15 seconds later.

High-Speed Continuous Shooting (High-speed Burst)

You can shoot continuously at a maximum speed of approximately 8.2 images/second while the shutter button is pressed fully and held.

1 Choose .

- Follow Steps 1 – 2 on p. 64 to choose .

2 Shoot.

- As long as you hold the shutter button down, the camera will shoot successive images.

- The recording pixel setting will be fixed at M (1984 x 1488 pixels).
- The focus, brightness and white balance will be set with the first shot.
- Depending on the shooting conditions, camera settings and the zoom position, the camera may stop shooting momentarily, or the shooting speed may slow down.
- As the number of images increases, the shooting speed may slow down.

Images Displayed During Playback

Since each set of continuous images will become a single group, only the first image captured in that group will be displayed. To indicate that the image is part of a group, will appear on the screen.

If you erase a grouped image (p. 139), all the images in the group will also be erased. Be sure to exercise adequate caution.

- If you want to play back images individually (p. 128), grouping can be canceled (p. 129).
- Protecting (p. 137) a grouped image, will protect all of the images in the group.
- If you play back grouped images using Filtered Playback (p. 123) or Smart Shuffle (p. 130), grouping is temporarily canceled and images are played back individually.
- Grouped images cannot use certain touch actions (p. 131), be tagged as favorites (p. 141), edited (pp. 144 – 150), categorized (p. 143), printed (p. 152) or have the number of copies to be printed set (p. 161). Play back grouped images individually (p. 128), or cancel grouping (p. 129) before trying the above.

Capturing the Best Facial Expressions (Best Image Selection)

The camera takes 5 continuous shots, then detects various aspects of the shot such as facial expressions, and saves only one picture detected as the best.

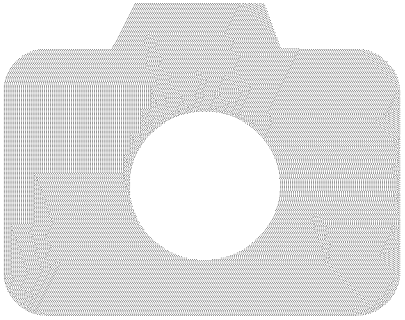
1 Choose 📸.

- Follow Steps 1 – 2 on p. 64 to choose 📸.

2 Shoot.

- When the shutter button is pressed fully, the camera takes five continuous shots, and saves one picture only.

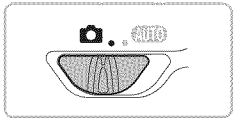
- The recording pixel setting will be fixed at M (1984 x 1488 pixels).
- The focus, brightness and white balance will be set with the first shot.
- Depending on the shooting conditions, you may not obtain the expected results.



5

Choosing Settings Yourself

In this chapter you will learn how to use the various functions in **P** mode to progressively advance your shooting skills.



- This chapter assumes that you have set the mode switch to 📷 and the camera is in **P** mode.
- **P** stands for Program AE.
- Before attempting to shoot using a function explained in this chapter in modes other than **P** mode, check if the function is available in those modes (pp. 192 – 197).

Shooting in Program AE

You can choose the settings for various functions to suit your preferences. AE stands for Auto Exposure.
The focusing range is approximately 5 cm (2.0 in.) – infinity at maximum wide angle ([▮▮▮]), and approximately 40 cm (1.3 ft.) – infinity at maximum telephoto ([▲]).

1 Enter P mode.

- Follow Steps 1 – 2 on p. 64 to choose **P**.

2 Adjust the settings according to your purposes (pp. 85 – 105).

3 Shoot.

What if the shutter speed and aperture value appear in orange?

If a correct exposure cannot be obtained when pressing the shutter button halfway, the shutter speed and aperture value appear in orange. Try the following settings to obtain the correct exposure.

- Turn on the flash (p. 85)
- Choose a higher ISO speed (p. 88)

Adjusting the Brightness (Exposure Compensation)

You can adjust the standard exposure set by the camera in 1/3-stop increments in the range of -2 to +2.

1 Enter Exposure Compensation mode.

- Touch ±0.

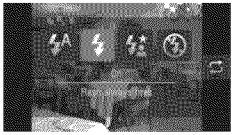
2 Adjust the brightness.

- While looking at the screen, touch the bar, or drag it left or right, to adjust the brightness, then touch ⮌.
- The exposure compensation amount will appear on the screen.

You can also make settings in the FUNC. menu that appears when you touch FUNC..

Turning the Flash On

You can make the flash fire every time you shoot.
The effective flash range is approximately 50 cm – 5.0 m (1.6 – 16 ft.) at maximum wide angle ([WIDE]), and approximately 50 cm – 2.0 m (1.6 – 6.6 ft.) at maximum telephoto ([TELE]).



Choose ϟ.

- Touch ϟA, then touch ϟ.
- Touch ϟ again to make the setting.
- Once set, ϟ will appear on the screen.

The edges of the image may darken if the flash fires.

You can also choose items by touching ⮂.

Adjusting the White Balance

The white balance (WB) function sets the optimal white balance for natural looking colors to match the shooting conditions.

1 Choose the white balance function.

- Touch FUNC., then drag up or down the menu on the left to choose AWB.

2 Choose an option.

- Touch an item you want to set.
- If you drag up or down the menu on the right, other items will appear.
- Touch the menu item again to complete the setting.
- The setting will appear on the screen.

AWB Auto	Automatically sets the optimal white balance for the shooting conditions.
Day Light	For shooting outdoors, in fine weather conditions.
Cloudy	For shooting in cloudy, shady or twilight conditions.
Tungsten	For shooting under tungsten and bulb-type (3-wavelength) fluorescent lighting.
Fluorescent	For shooting under warm-white fluorescent, cool-white fluorescent and warm-white-type (3-wavelength) fluorescent lighting.
Fluorescent H	For shooting under daylight fluorescent and daylight-type (3-wavelength) fluorescent lighting.
Custom	For manually setting a custom white balance.

Custom White Balance

You can adjust the white balance to match the light source at the shooting location. Make sure that you set the white balance under the light source of the actual scene you will shoot.

- Follow Step 2 on p. 86 to choose .
- Make sure the entire screen is filled with a plain, white colored subject, then touch on the right.
- The tint on the screen will change when white balance data is set.

If you change camera settings after recording white balance data, the tone may not turn out properly.

Changing the ISO Speed

1 Choose the ISO speed.

- Touch FUNC., then drag up or down the menu on the left to choose ISO AUTO.

2 Choose an option.

- Touch an item you want to set.
- If you drag up or down the menu on the right, other items will appear.
- Touch the menu item again to complete the setting.

▶ The setting will appear on the screen.

ISO AUTO		Automatically adjusts the ISO speed to the Shooting mode and shooting conditions.
ISO 100 ISO 200	Low	For shooting outdoors, in fine weather conditions.
ISO 400 ISO 800	↕	For shooting in cloudy, or twilight conditions.
ISO 1600 ISO 3200	High	For shooting nightscapes, or in dark interiors.

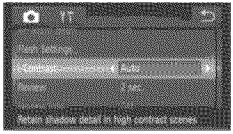
Changing the ISO speed

- Lowering the ISO speed results in sharper images, but there may be an increased chance of image blurring in certain shooting conditions.
- Raising the ISO speed results in a faster shutter speed, reducing image blurring and letting the flash reach greater distances to the subject. The images, however, will appear coarse.

When the camera is set to ISO AUTO, you can press the shutter button halfway to display the automatically set ISO speed.

Correcting the Brightness and Shooting (i-Contrast)

The camera can detect areas in the scene, such as faces or backgrounds, that are too bright or dark and automatically adjust them to the optimum brightness when shooting. Also, when the overall image is lacking in contrast, the camera will automatically correct the image for a sharper impression when shooting.



Choose [i-Contrast].

- Touch FUNC., then MENU to choose the tab. Touch [i-Contrast], then touch ◀▶ to choose [Auto].
- Once set, will appear on the screen.

- Under some conditions, the image may appear coarse or may not be corrected properly.
- You can correct recorded images (p. 149).

Changing the Aspect Ratio

You can change the width to height ratio of an image.

1 Choose 4:3.

- Touch FUNC., then drag up or down the menu on the left to choose **4:3**.

2 Choose an option.

- Touch an item you want to set.
- If you drag up or down the menu on the right, other items will appear.
- Touch the menu item again to complete the setting.
- Once set, the aspect ratio of the screen will change.

16:9	The same aspect ratio as the screen of this camera, used for displaying on wide-screen HD TVs.
3:2	The same aspect ratio as 35mm film, used for printing out 5 x 7 in. or postcard sized images.
4:3	The same aspect ratio as standard televisions, used for printing images on 3.5 x 5 in. to various A-sized papers.
1:1	A square-shaped aspect ratio.

The digital zoom (p. 55) and digital tele-converter (p. 56) are only available in the **4:3** aspect ratio since [Digital Zoom] is fixed to [Off].

How can I shoot with the display at full screen?

Set the aspect ratio to **16:9**. However, shooting at a 16:9 aspect ratio will result in images whose aspect ratio does not match 5 x 7 in., Postcard size, 3.5 x 5 in., or various A sizes of paper when printing. White margins may be left in the print, and some portions of the image may not print.

Continuous Shooting

You can shoot continuously at a maximum speed of approximately 3.4 images/second while the shutter button is pressed fully and held.

1 Choose a Drive mode.

- Touch FUNC., then drag up or down the menu on the left to choose □.

2 Choose an option.

- Touch ⧉.
- Touch ⧉ again to make the setting.
- Once set, ⧉ will appear on the screen.

3 Shoot.

- As long as you hold the shutter button down, the camera will shoot successive images.

- Cannot be used with the self-timer (pp. 58, 59).
- Continuous shooting speed increases in ⚡ mode (p. 65).
- For continuous shooting, the focus and exposure are locked when the shutter button is pressed halfway.
- Depending on the shooting conditions and the camera settings, the camera may stop shooting momentarily, or the shooting speed may slow down.
- As the number of images increases, the shooting speed may slow down.
- If the flash fires, the shooting speed may slow down.

Changing the Tone of an Image (My Colors)

You can change the tone of an image, for example to sepia or black and white, when shooting.

1 Choose My Colors.

- Touch FUNC., then drag up or down the menu on the left to choose .

2 Choose an option.

- Touch an item you want to set.
- If you drag up or down the menu on the right, other items will appear.
- Touch the menu item again to complete the setting.

The setting will appear on the screen.

My Colors Off	—
Vivid	Emphasizes the contrast and color saturation for a vivid impression.
Neutral	Tones down the contrast and color saturation for neutral hues.
Sepia	Changes the image to sepia tones.
B/W	Changes the image to black and white.
Positive Film	Combines the effects of Vivid Red, Vivid Green and Vivid Blue to produce intense natural appearing colors like those obtained with positive film.
Lighter Skin Tone	Makes skin tones lighter.
Darker Skin Tone	Makes skin tones darker.
Vivid Blue	Emphasizes blue tints. Makes the sky, ocean and other blue subjects more vivid.
Vivid Green	Emphasizes green tints. Makes mountains, foliage and other green subjects more vivid.
Vivid Red	Emphasizes red tints. Makes red subjects more vivid.
Custom Color	You can adjust contrast, sharpness, and color saturation etc. to your preference (p. 93).

- The white balance cannot be set in and (p. 86).
- In and , colors other than people's skin color may change. You may not obtain the expected results with some skin colors.

Custom Color

The contrast, sharpness, color saturation, red, green, blue, and skin tones in an image can be chosen and set at 5 different levels.

- Follow Step 2 on p. 92 to choose .
- Touch on the right side of the screen.

- Touch ◀▶ to choose an item, then touch the point on the bar where you want to make a setting.
- The more to the right, the stronger/darker (skin tone) the effect gets, the more to the left, the weaker/lighter (skin tone) the effect gets.
- Touch ↩ to make the setting.

Shooting Close-ups (Macro)

You can shoot an object at a close distance or even shoot extreme close-ups of it. The focusing range is approximately 3 – 50 cm (1.2 in. – 1.6 ft.) from the end of the lens at maximum wide angle ([W]).

Choose .

- Touch FUNC., then drag up or down the menu on the left to choose .
- Touch , then touch again to complete the setting.
- Once set, will appear on the screen.

How can I take better close-ups?

In macro shooting, try attaching the camera to a tripod and shooting in (2) to prevent the camera from moving and blurring the image (p. 59).

will turn gray in the area that displays in the yellow bar underneath the zoom bar, and the camera will not focus.

Shooting Far Away Subjects (Infinity)

When it is difficult to focus because your shot contains subjects that are both near and far, you can change the focusing range to focus more reliably on far away subjects (approx. 3 m (9.8 ft.) or more from the camera) only.

Choose .

- Touch FUNC., then drag up or down the menu on the left to choose .
- Touch , then touch again to complete the setting.
- Once set, will appear on the screen.

Changing the AF Frame Mode

You can change the AF (Auto Focus) frame mode to match the scene you want to shoot.

Choose [AF Frame].

- Touch FUNC., then MENU to choose the tab. Touch [AF Frame], then touch ◀▶ to choose an option.

Face AiAF

- Detects people's faces and sets the focus, exposure (evaluative metering only) and white balance (AWB only).
- When the camera is pointed at subjects, a white frame appears on the face the camera judges to be the main subject, and gray frames (max. 2) will appear on other faces.
- A frame will follow a moving subject within a certain range.
- When the shutter button is pressed halfway, up to 9 green frames will appear on faces that the camera focuses on.

- If a face is not detected and only gray frames (no white frame) appear, up to 9 green frames will appear on the areas the camera focuses on when the shutter button is pressed halfway.
- If a face is not detected when Servo AF (p. 100) is set to [On], the AF frame will appear in the center of the screen when you press the shutter button halfway.
- Examples of faces that cannot be detected:
  - Subjects that are far away or extremely close
  - Subjects that are dark or light
  - Faces turned to the side or at an angle, or faces with a portion hidden
- The camera may mistakenly identify non-human subjects as a face.
- If the camera cannot focus when you press the shutter button halfway, the AF frame will not appear.

Fixed Frame

A single AF frame will be used. This is effective for focusing on a specific point.

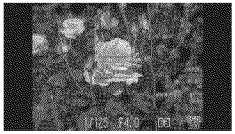
You can reduce the AF frame size

- Touch FUNC., then MENU to choose the tab, then touch [AF Frame Size] and choose [Small].
- The AF frame is set to [Normal] when using the digital zoom (p. 55) or digital tele-converter (p. 56).

If the camera cannot focus when you press the shutter button halfway, the AF frame will turn yellow and ! will appear.

Changing the Composition with the Focus Lock

While you keep the shutter button pressed halfway, the focus and exposure are locked. You can now recompose and shoot. This is called Focus Lock.



1 Focus.

- Center the subject you want in focus, and press the shutter button halfway.
- Confirm that the AF frame on the subject is green.

2 Recompose.

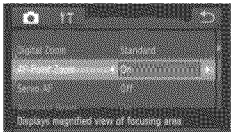
- Keep the shutter button pressed halfway and move the camera to recompose the scene.

3 Shoot.

- Press the shutter button fully.

Magnifying the Focal Point

If you press the shutter button halfway, the AF frame will magnify and you can check the focus.



1 Choose [AF-Point Zoom].

- Touch FUNC., then MENU to choose the tab. Touch [AF-Point Zoom], then touch ◀▶ to choose [On].

2 Check the focus.

- Press the shutter button halfway.
- In [Face AiAF] (p. 95), the face detected as the main subject will appear magnified.
- In [Fixed frame] (p. 96), the contents of the AF frame will appear magnified.

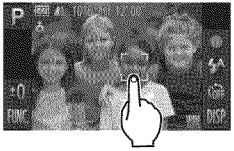
What if the display does not magnify?

The display will not appear magnified in [Face AiAF] if a face cannot be detected or is too big in relation to the screen. In [Fixed frame], it will not appear magnified if the camera cannot focus.

The magnified display will not appear when using the digital zoom (p. 55), digital tele-converter (p. 56) or Servo AF (p. 100).

Choosing the Subject to Focus On (Touch AF)

You can choose a specific subject or person's face, or a location on the screen, to focus on and shoot.



1 Choose the subject, face or location to focus on.

- Touch the subject or person shown on the screen.

- When the AF frame mode is set to [Face AiAF], the camera will beep and display when it detects the subject. The camera will continue to focus even if the subject moves.
- When the AF frame mode is set to [Fixed frame], an AF frame will appear at the location where you touch the screen.
- To cancel, touch ⮌.

2 Shot.

- Press the shutter button halfway. The frame where the camera focused will change into a green [ ].
- Press the shutter button fully to shoot.

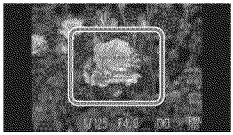
- The camera may not be able to track the subject if the subject is too small, moves too quickly or if the contrast between the subject and the background is too low.
- When shooting in or (p. 94) with the AF frame mode set to [Face AiAF], choosing a location to focus on returns the camera to .

A border appeared around the screen when it was touched

Touch operations on faces or subjects appearing outside the border will not work. They will work if the face or subject move inside the border.

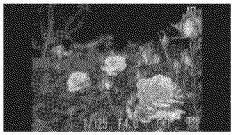
Shooting with the AF Lock

The focus can be locked. After locking the focus, the focal distance will not change even when you release your finger from the shutter button.



1 Lock the focus.

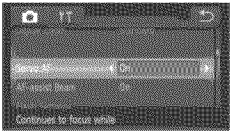
- Keep the shutter button pressed halfway and touch inside the frame shown on the left.
- The focus locks and AFL appears on the screen.
- If you release your finger from the shutter button and touch the screen again, AF lock will cancel, and AFL will disappear.



2 Compose the scene and shoot.

Shooting with Servo AF

While the shutter button is pressed halfway, the focus and exposure will continue to adjust, allowing you to take pictures of moving subjects without missing a shot.



1 Choose [Servo AF].

- Touch FUNC., then MENU and choose the tab and touch [Servo AF], then touch ◆▶ to choose [On].

2 Focus.

- The focus and exposure will be maintained where the blue AF frame appears while you press the shutter button halfway.

- The camera may not be able to focus in some conditions.
- In low light conditions, AF frames may not turn blue even after pressing the shutter button halfway. In this case, you can set the focus and exposure with the AF frame setting.
- If a correct exposure cannot be obtained, the shutter speed and aperture value appear in orange. Release your finger from the shutter button, then press it again halfway.
- You cannot shoot with the AF lock in this mode.
- The [AF-Point Zoom] option in the tab is not available in Servo AF mode.
- Not available when using the self-timer (pp. 58, 59).

Changing the Metering Method

You can change the metering method (brightness measuring function) to match the shooting conditions.

1 Choose the metering method.

- Touch FUNC., then drag up or down the menu on the left to choose [⊙].

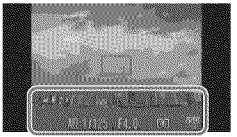
2 Choose an option.

- Touch an item you want to set.
- Touch the menu item again to complete the setting.
- The setting will appear on the screen.

[⊙] Evaluative	For standard shooting conditions, including back lit shots. Automatically adjusts the exposure to match the shooting conditions.
[ ] Center Weighted Avg.	Averages the light metered from the entire frame, but gives greater weight to the center.
[•] Spot	Only meters within the [ ] (Spot AE Point frame) that appears at the center of the screen. When the AF frame mode is set to [Fixed frame], the Spot AE Point frame will be linked to the AF frame.

Shooting with the AE Lock

You can lock the exposure and shoot, or set the focus and exposure separately to shoot. AE stands for "Auto Exposure".



1 Lock the exposure.

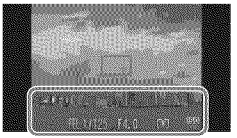
- Point the camera toward the subject and touch the lower part of the screen (inside the frame shown on the left) while pressing the shutter button halfway.
- When AEL appears, the exposure will be locked.
- If you release your finger from the shutter button and touch the screen again, AEL will cancel, and AEL will disappear.

2 Compose the scene and shoot.

Shooting with the FE Lock

Just as with the AE lock (p. 102), you can lock the exposure for shooting with the flash. FE stands for "Flash Exposure".

1 Choose ⚡ (p. 85).



2 Lock the flash exposure.

- Point the camera toward the subject and touch the lower part of the screen (inside the frame shown on the left) while pressing the shutter button halfway.
- The flash will fire and when FEL appears, the flash output will be retained.
- If you release your finger from the shutter button and touch the screen again, FEL will disappear.

3 Compose the scene and shoot.

Shooting with Slow Synchro

You can make the main subject, such as people, appear bright by having the camera provide the appropriate illumination with the flash. At the same time, you can use a slow shutter speed to brighten the background that the light from the flash cannot reach.

1 Choose ⚡S.

- Touch ⚡A, then touch ⚡S.
- Touch ⚡S again to make the setting.
- Once set, ⚡S will appear on the screen.

2 Shoot.

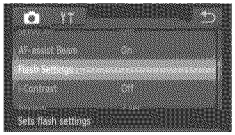
- Even if the flash fires, ensure that the main subject does not move until the shutter sound ends.

Attach the camera to a tripod to prevent the camera from moving and blurring the image. Additionally, you should set the [IS Mode] to [Off] when shooting with a tripod (p. 173).

You can also choose items by touching ↻.

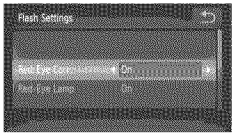
Red-Eye Correction

You can automatically correct red-eye that occurs in images taken with the flash.



1 Choose [Flash Settings].

- Touch FUNC., then MENU and choose the tab and touch [Flash Settings].



2 Choose the setting.

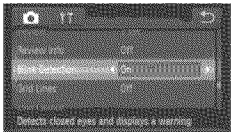
- Touch [Red-Eye Corr.], then touch ◀▶ to choose [On].
- Once set, ⓞ will appear on the screen.

Red-eye correction may be applied to areas other than red eyes. For example, when red make-up has been used around eyes.

You can also correct recorded images (p. 150).

Checking for Shut Eyes

When the camera detects the possibility that people have their eyes shut,  appears on the screen.



1 Choose [Blink Detection].

- Touch FUNC., then MENU to choose the tab. Touch [Blink Detection], then touch ◀▶ to choose [On].

2 Shoot.

- When a person with shut eyes is detected, a frame and  appear on the screen.

- This function is only available for the last image shot when you have set the camera to 2 or more shots in or mode.
- Not available in mode.

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